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ABSTRACT

This bulletin examines the baby boom, its causes, its size, and its impact on U.S. society. Nearly 42 million births occurred in the U.S. from 1955 to 1964. Several reasons are given for this baby boom which interrupted a century long fertility decline. Demographically the primary causes were more people marrying and having at least two children at earlier ages. Economic conditions were favorable. The demand for labor was high and the young people entering the job market were few. Sociological causes of the baby boom were the pervasive pro-marriage, pro-housewife, pro-natalist forces prevalent at that time. To accomodate the baby boom generation, school and college facilities expanded enormously in the 1960's and early 1970's. Unemployment and crime rates rose and subsided with the passage of this generation through late teenage and early adulthood. In the 1980's with the bulk of the baby boom generation aged 20-30, housing demand will remain high and annual birth numbers will increase even if the rate of childbearing hovers below replacement level at about 1.8 births per woman as it has since 1974. Per capita earnings and overall labor productivity should improve as the baby boom group settles into experienced middle age in the 1990's. Society's greatest challenge will come as this generation reaches retirement age. The 65 and over population will nearly double from 31 million in 2000 to almost 60 million in 2030. The ratio of active workers paying into the Social Security pool to elderly beneficiaries will fall drastically. (Author/RM)

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Population Bulletin

America's Baby Boom Generation:

The Fateful Bulge

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Abstract—Nearly 42 million births occurred in the U.S. from 1955 to 1964, a ten-year record unequaled to then and unlikely soon to be repeated. This *Bulletin* explores the baby boom's roots and lasting impact on U.S. society—an impact accentuated by the phenomenon's unexpected interruption of a century-long fertility decline and the relatively small sizes of the preceding Depression and following "baby bust" birth cohorts. Large families explain less of the baby boom than commonly thought. Demographically, the main cause was a near-universal rush into early marriage and formation of families of at least two children. This was fueled by favorable economic conditions for the relatively scarce young men of the Depression cohort then entering the job market and a revival of pro-marriage, pro-natalist norms long present in U.S. culture. To accommodate the outsize baby boom cohort, school and college facilities expanded enormously in the 1960s and early 1970s and are now too abundant for the current school-age baby bust cohort. Similarly, unemployment and crime rates rose and subsided with the passing of the baby boomers through late teenage and early adulthood. In the 1980s, with the bulk of baby boomers aged 20-30, housing demand will remain high and annual birth *numbers* will increase even if the *rate* of childbearing hovers below replacement level at about 1.8 births per woman as it has since 1974. Per capita earnings and overall labor productivity should improve as the baby boom cohort settles into experienced middle age in the 1990s, although advancement chances will be limited for the cohort's members. U.S. society's greatest baby boom challenge will come as the cohort reaches retirement age; the 65-and-over population will nearly double from 31 million in 2000 to almost 60 million in 2030. The ratio of active workers paying into the Social Security pool (the baby bust cohort) to elderly beneficiaries will fall drastically although the burden will be offset somewhat by reduced proportions of young dependents under age 18.

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By Leon F. Bouvier

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POPULATION BULLETIN
Vol. 35, No. 1, April 1980

America's Baby Boom Generation: The Fateful Bulge

By **Leon F. Bouvier**
Select Commission on Immigration and Refugee Policy

Seldom does a day or week go by without the media—be it radio or television, newspapers or magazines—making reference to the "baby boom" and its impact on some aspect of U.S. society. Indeed, when it comes to U.S. population matters, the concern of a decade ago over population growth itself now appears to have shifted to anxiety over changing age patterns or the population's "age distribution." Changes in the proportion of people in various age ranges are by and large the results of changes in fertility. And it was changes in fertility that brought about the post-World War II baby boom cohort and its smaller neighboring cohorts, the Depression cohort of the 1930s and the "baby bust" cohort of the 1970s.*

This *Bulletin* focuses on the baby boom cohort or generation—its causes, its size, and most importantly, its impact on society. As it moves through life, this swollen generation creates a bulge in the U.S. population age distribution that demographers have likened variously to "a goat (or a watermelon or a pig or an elephant) passing through a boa constrictor (or a python)." "Much of our recent and future history will consist of this giant generation passing through infancy, youth, the middle years and old age," says Harvard University demographer William Alonso.[1]

The baby boom seems "explosive" only because the preceding and following cohorts were relatively small. To get a better perspective on the baby boom's impact, all three generations must be analyzed. Hospitals that rushed to accommodate soaring numbers of births

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Dr. Bouvier acknowledges the indefatigable assistance of PRB Director of Publications Jean van der Tak in the preparation of this Bulletin. *Mary Barberis, Carl Haub, and Elaine Murphy of the PRB staff also merit a heartfelt thank-you for having read through the manuscript and for making valuable suggestions, many of which were incorporated in the final version.*

*A cohort consists of all the people born within a stated relatively short period, e.g., five or ten years.

in the 1950s were caught with empty maternity wards as births began to subside in the mid-1960s. Elementary schools and then high schools in their turn went through similar boom and bust sequences. And now in the 1980s, universities are being left with an oversupply of just-completed buildings and tenured faculties as the baby boomers begin to move out of the 18-24 age bracket.

The aging of the baby boomers followed by the thinner ranks of the baby bust generation promises some good things. The high juvenile-delinquency, crime, and unemployment rates of the late 1960s and 1970s should come down as teenagers dwindle in number in the 1980s. Inflation fueled by the soaring demand for housing should abate as the peak of the baby boom generation leaves behind the 20-30 household-formation ages. But off in the 21st century lurks the crunch that could come as this generation begins to retire and the smaller following cohorts are left to finance their Social Security benefits.

What Was the Baby Boom?

In many ways, the baby boom was like a sonic boom, so startling was this unanticipated fertility increase. Simply stated, the baby boom was a "disturbance" which emanated from a decade-and-a-half-long fertility splurge on the part of American couples. This post-World War II phenomenon upset what had been a century-long decline in the U.S. fertility rate. Upon completion of this extraordinary period of family formation, the fertility rate once again resumed its long-term decline and recently attained a record low point.

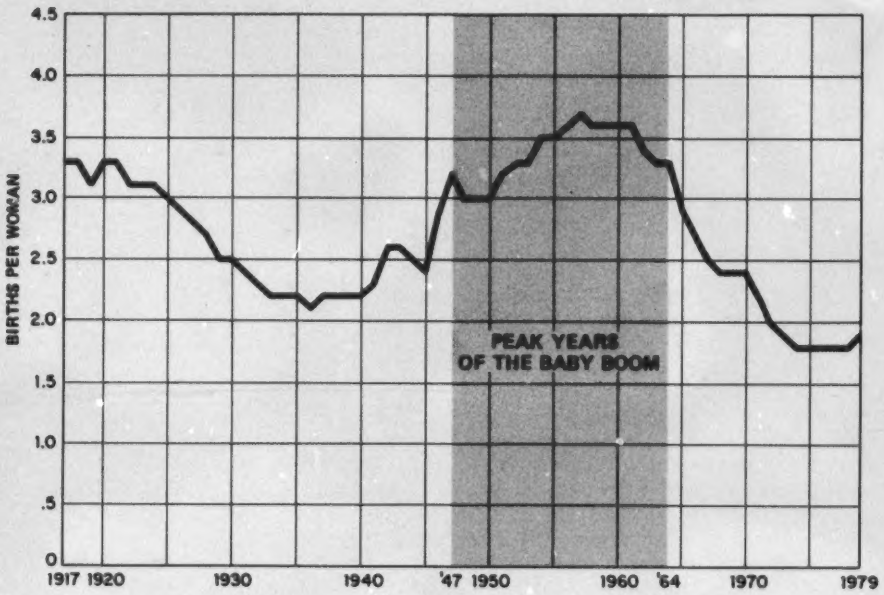
A few other countries also participated in this fertility rite. Canada's fertility trends and those of Australia and New Zealand are remarkably similar to the experience of the U.S. But the phenomenon did not occur in the developed countries of Western Europe, nor in the centrally-planned nations of Eastern Europe. In most instances, fertility increased for a few brief years after the end of World War II and then returned to the low levels prevalent prior to the war.

U.S. demographers were caught short. Most were prepared for a brief postwar spurt in annual births but not the protracted surge that followed. Indeed, in the 1940s, demographers were predicting that the U.S. population would soon stop growing at a size far below the numbers we now have. Demographers Warren Thompson and Pascal Whelpton predicted in 1943, for example, that the 1970 figure would be 157 million and that the nation's population would peak at 161 million in 1985 and then begin to decline.[2] The figure in 1970 was, in fact, 204 million and in 1985 is likely to be 230 million and still growing at close to 2 million a year.

The mistaken forecasts of the early 1940s were based on more than simple extrapolation of past trends. They stemmed also from what was then (and still) accepted sociological theory. With increasing urbanization and "modernization" would come a shift from a traditional to a rational way of life. And with a rational way of life, it was held, women would be freed from the bondage of the home, individualism would flourish, family functions would be taken over by specialized institutions, contraception would become universal, and large families would be relegated to the past.

Contrary to popular opinion, the baby boom did *not* represent a return to the large family of the 19th century. What actually happened, as demographer Charles Westoff puts it, was "a movement away from spinsterhood, childless marriage and the one-child family, and a bunching together of births at early ages. Only a minor part of the baby boom can be attributed to increases in the proportions having three or more births," he claims.[3] The pro-

Figure 1. Total Fertility Rates for U.S. Women: 1917-1979



Sources: 1917-75: Selma Taffel, *Trends in Fertility in the United States*, Vital and Health Statistics, Series 21: Data from the National Vital Statistics System, No. 28 (Hyattsville, Md.: National Center for Health Statistics, 1977) Table 13; 1976-77: U.S. Bureau of the Census, *Statistical Abstract of the United States, 1979*, Table 82; 1978: U.S. Bureau of the Census, "Population Profile of the United States: 1978," *Current Population Reports*, Series P-20, No. 336, Table 3; 1979: National Center for Health Statistics, Natality Division, personal communication, April 1980.

portion of women having at least two births rose from 55 percent in the 1930s to 85 percent in the 1950s.[4] However, the average number of children that women actually had altogether rose only from a low of 2.3 apiece (for women born in 1908) to about 3.2 (the "completed family size" that the Census Bureau calculates women born in 1935 will have averaged by the time they reach age 50).[5]

When Was the Baby Boom?

To pinpoint the period of the baby boom, both the rates and numbers of births must be considered. If we are interested in fertility behavior—the annual number of births per woman—the rates are the crucial indicators; if we are interested in societal impacts of different cohorts, then the number of births occurring in a given year is more meaningful.

To trace 20th century trends in U.S. fertility rates, we use the total fertility rate (Figure 1). The total fertility rate of a given year indicates the number of children that would be born to each woman in a population during her lifetime if each were to have children throughout her childbearing years (considered ages 15 through 44) at the same rate as women of those ages actually did in that year. It is not the same as the average completed family size, mentioned above—the number of children that women of a particular cohort *actually* had on the average by the time they

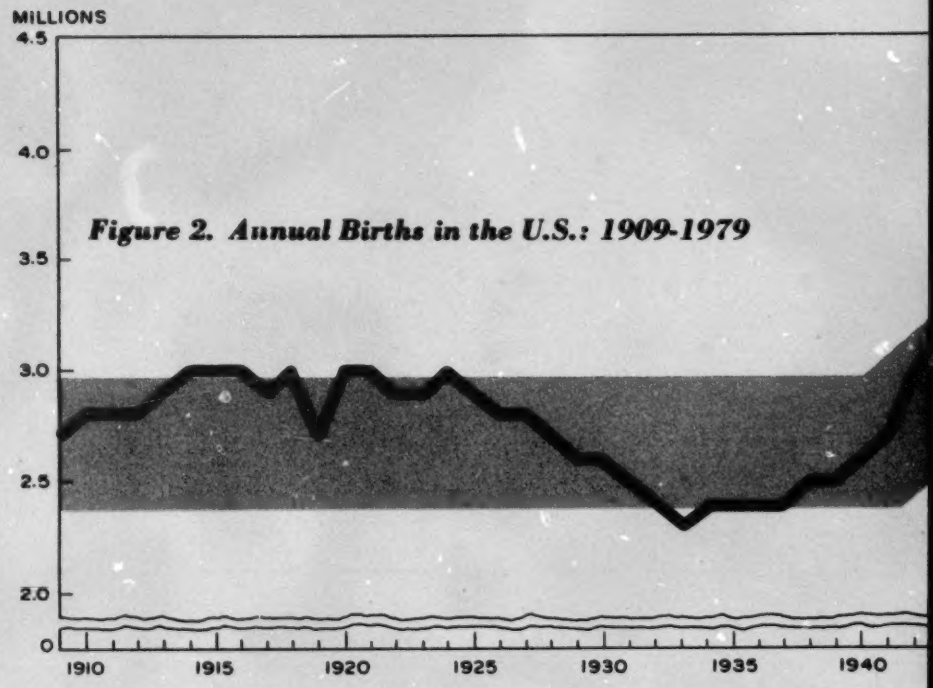


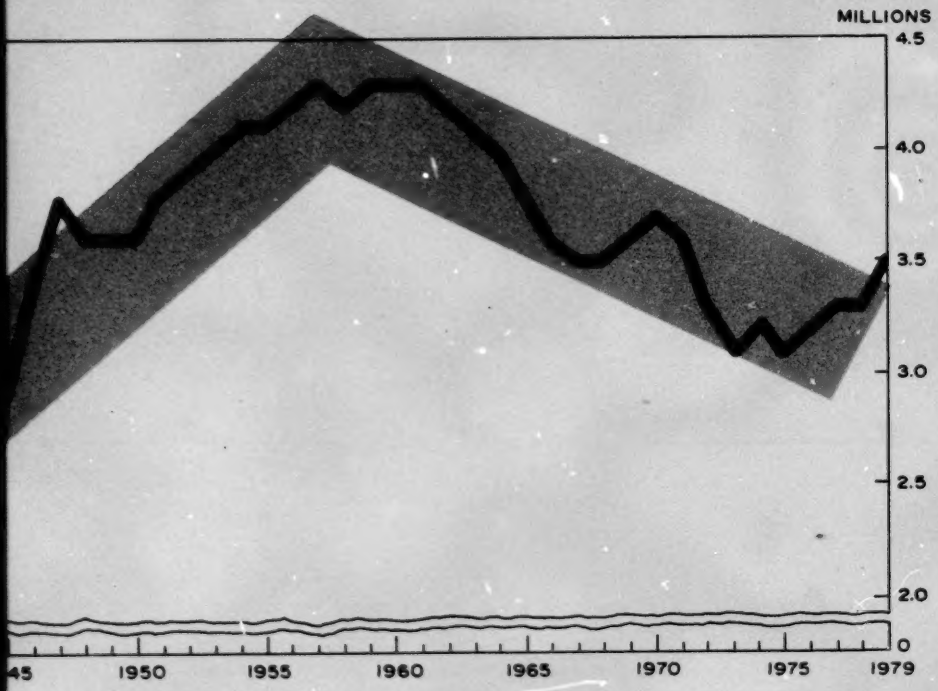
Figure 2. Annual Births in the U.S.: 1909-1979

Sources: See Figure 1.

reached age 45 or 50—but it is a good measure of fertility behavior, or childbearing patterns, in a given year.

As seen in Figure 1, the total fertility rate fell quite steadily from 3.3 per woman in 1917 to 2.1 in 1936 (with a dip during the influenza epidemic year of 1919). This was followed by a slight rise to 1943, another dip, a sharp rise in 1947 to 3.2, a leveling off to 1950, and then a dramatic increase to a peak of 3.7 births per woman in 1957. A gradual but steady decline then began and with slight modifications has continue to the present day. (The estimated 1979 rate was just under 1.9, up slightly from about 1.8 in 1978.) If *rates* are the criteria for determining when the baby boom occurred, one could say, 1947 through 1964—18 years when the total fertility rate remained over 3.0.

If the trend in *numbers* of births per year is analyzed, the picture is somewhat different. Figure 2 shows this from 1909 through 1979. Unlike the total fertility rate, annual numbers of births showed little variation before World War !I. Indeed, the total in 1941 was the same as in 1909 (2.7 million). In the 37 years from 1909 through 1945, the average annual number of births was 2,747,000. In only six of those years did the number vary by more than 10 percent from that average. Twice it just cleared 3 million—in 192i shortly after World War I and in the World War II year of 1943. During four Depression years (1933 through 1936) births fell below 2.4 million. Otherwise, annual births were extraordinarily stable



throughout the 37-year period.

After 1945, the number of annual births jumped remarkably. A million more births took place in 1947 than in 1945 and for the next 17 years the annual average was 4,035,000. At no time did the annual total vary by as much as 10 percent from that average. While the peak year was 1957 (as it was for the total fertility rate) when more than 4.3 million births were recorded, the number of births was greater from 1955 through 1964 than it had been between 1948 and 1957. In the 1955-64 decade, nearly 42 million births took place—the most ever recorded in the U.S. in any ten-year period. By the mid-1970s, births had fallen to just over 3 million per year, only slightly higher than in the early 1940s. (The total climbed back to 3.5 million in 1979.) In looking at numbers of births, then, one could say that the baby boom period was concentrated from 1954 through 1964 when over 4 million births occurred each year.

For practical reasons, in this *Bulletin*, we will rely on conventional decades to define our cohort dimensions. The baby boom, while it lasted from 1947 to 1964, will be treated as the decade of the 1950s (1950-59), implicitly accepting some spillover at both ends of the decade. The Depression cohort are the people born in the 1930s (1930-39). The baby bust cohort is that of the 1970s (1970-79). The intermediate decades are transition periods; the 1940s being on the rise toward the baby boom; the 1960s being on the decline to the baby bust.

Reasons for the Baby Boom

Any attempt to explain the baby boom must turn to several types of reasons: economic, sociological and psychological, as well as demographic. Labeling the phenomenon the "post-World War II baby boom" suggests erroneously that its prime cause was the end of hostilities when troops returned home, some to their wives and others to fiancees. Marriage rates skyrocketed immediately after the war (as did the divorce rate) and family formation was hurried to compensate for years of separation. This explains the first very short period of high fertility as it does the postwar boomlet in European countries. But after the spurt of 1947, both the rate and number of births fell off for the next three years. It was not until 1951 that the real baby boom got under way. Postwar family reunification and/or formation does not explain the high fertility that lasted for well over the next decade. As Donald Bogue notes, "the peak rate [in 1957-59] was achieved 11 to 13 years after military demobilization and the other dislocations associated with World War II."[6] Reunification after the Korean War which drew over six million American men away from home in 1950-53 could well have contributed to the soaring fertility of the mid-1950s, but that too was over long before the baby boom subsided.

Demographic factors

As noted, a dramatic rise in large families does not explain the baby boom, although the proportions of women having three or more children did rise. For example, close to 60 percent of women born in 1935 who were in the prime childbearing ages during the baby boom had had three or more births by the time they were 39 compared to just 32 percent at that age among Depression cohort mothers born in 1908.[7] Demographically, however, the primary causes of the baby boom were more people marrying and having at least two children at earlier ages, and also what may have been some "makeup" births among older women who were previously childless. The total fertility rate did remain above 3.6 per women from 1956 to 1960—extraordinarily high for a developed nation and 60 percent higher than that recorded in 1940. But the total fertility rate is a synthetic measure which is affected by the *timing* of births. No cohort of American women born in this century has actually had an average of that many births per woman.

This timing peculiarity is revealed in the total fertility rate for *first* births among white women during the baby boom. Between 1947 and 1957, that rate was almost always above 1, indicating more than one first birth per woman—clearly an impossibility for any real cohort of women. This anomaly reflects the overlapping of two age patterns of childbearing. First-birth rates were very high for older women as well as for younger women during this period.[8] Older women were also rushing into motherhood, but it was the younger women who made the most difference.

For them, marriage came sooner than it had for their mothers or would for their daughters. In 1956, women's median age at first marriage stood at just over 20—down from 21.3 in 1930. In other words, half of all women marrying for the first time in the early part of the baby boom were teenagers. In 1960, at the height of the baby boom, nearly three-quarters (71 percent) of women aged 20-24 were or had been married compared to barely half (51 percent) 19 years later in 1979.[9]

Babies came sooner and faster. Half of the first births to women who married between 1955 and 1964 came within 15 months after marriage, an interval only about half as long as that for women married during the 1930s (25 to 26 months) or those married in the early 1970s (27 months).[10] And during the

Marriage was popular and early during the baby boom era.

1950s, women had their second births by age 24.7 on the average—down from age 27.1 in the 1930s.[11] Childlessness was also much rarer. In a 1975 national survey, only 8 percent of women who had married during the heart of the baby boom, 1955-64, reported themselves as still childless, compared to 16 percent of those married in the 1930s.[12]

What caused this headlong rush into marriage and parenting among young American women—behavior so different from that of their mothers a generation earlier and their daughters now?

Economic causes

For some economists, the answer seems straightforward. The U.S. economy expanded rapidly after World War II, first carried along by the stimulus of the war itself and later by the enormous expansion in transportation, housing, and government spending associated with the growth of metropolitan areas. Demand for labor was high and the supply available to fill it—young people age 15-29 just entering the job market—came from the relatively small birth cohort of the 1930s. Younger workers also enjoyed an advantage over older workers because secondary schooling had expanded rapidly between 1920 and 1940. Thus encouraged by good jobs with relatively high wages and the prospects of rapid promotion, young men were quick to marry and start families. The GI bill and Veterans Administration financing for housing also made it easy for veterans to get an early start at family-building. Young couples swarmed to the expanding suburbs with their three-bedroom homes, each with a private lot safe for small children. Further, raised in the relative deprivation of the Depression years, these young couples had not developed "tastes" for such luxury consumer items as a second car or a summer home. Extra income might well go into an extra child or two.

Economist Richard Easterlin, a leading proponent of this explanation for the baby boom, sees this same set of

conditions, but this time in reverse, operating to explain the downturn in fertility during the later 1960s and 1970s. But by the late 1980s young adults (the forerunners of the baby bust generation) will again be relatively scarce, thus boosting the job and earnings opportunities of young men relative to older male workers over what they were for their baby boom counterparts. And this will touch off another round of early marriage and family formation and a rise in the birth rate, Easterlin predicts.[13]

Sociological causes

Sociologists have a different explanation for the baby boom. For them the key lies in pervasive pro-marriage, pro-housewife, and pro-natalist forces that have always been woven into American culture and which somehow resurfaced after the Depression years and World War II when young women had gone to work—and college—in large numbers and at least dreamed of having a career. Betty Friedan called it the "feminine mystique" in her 1963 book that helped fertilize the rebirth of feminism in the U.S.—the women's liberation movement.

Describing women's lives in the 1950s, she wrote:

"... kitchens were once again the center of women's lives. . . . Girls were growing up in America without ever having jobs outside the home [and although] a third of American women now worked, most were no longer young and very few were pursuing careers. They were married women who held part-time jobs, selling or secretarial, to put their husbands through school, their sons through college, or to help pay the mortgage. Or they were widows supporting families. Fewer and fewer women were entering professional work. Shortages in the nursing, social work, and teaching professions caused crises in almost every American city. Concerned over the Soviet Union's lead in the space race, scientists noted that America's greatest source of unused brain-power was women. But girls would not study physics: it was "unfeminine." A girl refused a science fellowship at Johns Hopkins to take a job in a real-estate office. All she wanted, she said, was what every other American girl wanted —to get married, have four children, and live in a nice house in a nice suburb."[14]

The "feminine mystique" that lured almost all women into early domesticity and parenting was the conviction that the proper and only truly fulfilling role for a woman was as wife and mother. Parenthood is also a precondition for the male role, this view holds, but as a father, the male is primarily a complement to the mother—"extra-familial, protective, economically supportive."[15] Women's magazines spread the revived gospel of parenting and "togetherness." Freudian psychology, sociological "functionalism," and Margaret Mead provided the scientific underpinnings.

Freud's influence was rising to a crescendo in the 1940s and 1950s and Freud had believed that women were compelled to compensate for the lack of a penis by having children. As demographer-sociologist Judith Blake puts it:

"Freudian psychology, from Freud to Deutsch to Erikson, is invariant in its insistence that the reproductive capacity must be actualized for the woman to approach mental health. Motherhood is what women do and they should not be encouraged to embark on social roles that conflict with the realization of their basic psycho-biological needs."[16]

Borrowing from biology and based on observations of primitive societies, social scientists in these years also began stressing that the proper functioning of the family—its "reproductive efficiency"—required that women assume the internal, nurturing role and men a task-oriented, external, supportive role. Family-life education became the fashion.

So did Margaret Mead. Ironically a leader in the later "feminine protest" and a profound influence on American women for three generations, Margaret Mead was an early functionalist. "Glori-

fication of women in the female role, as defined by their sexual biological function" permeates her prolific writings beginning with *Coming of Age in Samoa* in 1928, although this is often confounded by the opposite message that "woman's potential is as great and various as the unlimited human potential."[17] The theme is most pervasive in *Male and Female*, published in 1955, her book which Friedan calls "the cornerstone of the feminine mystique."[18]

Unwanted fertility

Another reason for the baby boom often given by demographers is the ambivalence of couples toward preventing that "extra" third or fourth child and consequent carelessness or inefficiency in practicing contraception.

We now know that large families were less common during the baby boom than has been supposed. But surveys of the time suggest that most couples wanted at least three children. Married women of childbearing age queried in a series of national fertility surveys reported an average wanted or desired family size of 3.4 to 3.5 in 1955, 3.6 to 3.7 in 1960, and 3.3 in 1965.[19] Demographers have become skeptical of generalized questions on "desired family size." A better measure of attitudes toward numbers of children is whether or not each pregnancy was wanted at the time it occurred. Questions about each of the repondents' births in turn using this approach were used in Princeton University's National Fertility Studies of 1965 and 1970. According to Norman Ryder, co-director of the studies with Charles Westoff, "The answers reveal a great deal of unwanted fertility in the 1950s, despite the stated levels of desired family size."[20]

In his view, two children has been the "fixed" norm for American couples in the 20th century and "all people are expected to marry and have [these] two children as soon as their economic circumstances permit." Economic conditions were unfavorable for fulfilling this norm in the 1930s and favorable in the 1950s. Having had two children early, young mothers of the 1950s faced "a long exposure to the risk of unwanted fertility." They felt little economic pressure to enter an unfamiliar work world and thus were likely to be ambivalent about the desirability of "yet another child" and apt to "relax contraceptive vigilance."

The National Fertility Studies revealed that the downturn in married couples' fertility during the 1960s was due almost entirely to a reduction in unwanted or "unplanned" births. Between 1961-65 and 1966-70, the "marital total fertility rate" fell from 3.82 to 2.91 births per woman. The decline in unplanned births accounted for 84 percent of that change; the drop in planned fertility for only 4 percent.[21] This decline was clearly due

Women's lives centered on family and home.

largely to rapidly increasing use of the highly effective contraceptive methods introduced or popularized in the 1960s: the pill, IUD, and sterilization.

In 1965, as the baby boom waned, 67 percent of married U.S. couples were regular contraceptors. Of these, a third were using the pill or IUD or had been sterilized. Ten years later the figures were: nearly 80 percent using contraception and close to three-quarters of these using the three most effective methods.[22] Women seeking to prevent unwanted births in the baby bust era have also had the option of legal abortion that was unavailable to their counterparts in the 1950s. Legalized in some states beginning in 1967 and nationally in 1973, legal abortions have climbed from 744,600 in 1973 to an estimated 1.4 million in 1978.[23]

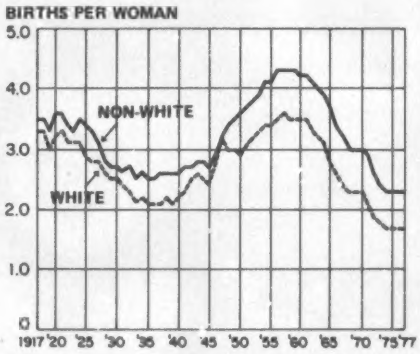
Who Produced the Baby Boom?

Just about every sub-group in American society contributed to the baby boom—rich and poor; white and black; Christian and Jew. But some, such as blacks and Catholics, were more involved than others.

Fertility trends among American blacks have virtually paralleled those of whites but always at a higher level.[24] As with whites, fertility among blacks had fallen to historic lows in the 1930s. In 1936, the total fertility rate for nonwhites (90 percent of whom were black) was only 2.5 births per woman. (The rate for white women reached its prewar low point in the same year at 2.1.) By 1956-58 it had peaked at 4.3 and remained close to that level until 1962 before beginning a steady fall in tandem with white fertility until the present day. In 1977 it stood at 2.3 births per women.

As can be seen in Figure 3, the effect of the baby boom was greater in the black than in the white portion of the U.S. population. Among whites, fertility actually stabilized for a few years after

Figure 3. Total Fertility Rates for U.S. Non-White and White Women: 1917-1977



Sources: See Figure 1.

the initial postwar spurt in 1946 and 1947. Among blacks, however, "with the onset of the baby boom in 1946 fertility . . . rose year by year and attained a level in 1957 that it had never before exhibited in the recorded statistical history of the United States."[25] As a result, the baby boom generation represents a higher proportion of the black population than it does of the white population. In 1979, for example, Census Bureau figures show that people aged 15-24 (born in 1955-64) comprised 19 percent of the black population compared to 17 percent among whites.[26] Since young black males are more likely to be undercounted than any other group, the actual difference is probably somewhat greater.

The National Fertility Studies suggest that a much higher rate of unwanted fertility explains much of the difference in black and white fertility but the difference narrowed rapidly in the 1960s as the baby boom abated. In the first half of that decade, black married couples had three times as many unwanted births as their white counterparts and a 40 percent higher rate of fertility. By the

end of the decade, the excess of black over white fertility had shrunk to 10 percent, levels of unwanted fertility were almost on a par at low levels, and a greater proportion of black wives than whites were using the pill or the IUD.[27]

Catholics are another group who were apparently affected more than average by the baby boom. Vital statistics are not available by religion, but numerous surveys taken over the years allow some general conclusions on their fertility relative to that of non-Catholics.

Fertility has traditionally been higher for Catholics than non-Catholics but all the evidence suggests that a gradual convergence took place during the 1920s and 1930s; that is, fertility fell for Catholics and non-Catholics alike, but the rate of decline was greater for Catholics. Some demographers of the day were predicting eventual equalization. A.J. Jaffe, for example, wrote: "The fertility of the Roman Catholics . . . appears to be decreasing so rapidly that by 1930 their fertility appears to have closely approached that of the non-Catholic."[28]

After World War II, however, when fertility mounted among all groups, Catholics exhibited greater gains than non-Catholics. Dudley Kirk concluded in 1955 that "the Catholic birth rate since the Second World War has reached a high and sustained level, with quite as large a differential [compared to non-Catholics] in crude rates as was recorded in the early 1920s."[29] Thomas Burch arrived at a similar conclusion in 1966: "In the U.S., recent evidence points to a persistent and even widening of the Catholic-nonCatholic differential."[30]

Unlike the black-white differential during the baby boom, the main reason for the Catholic/non-Catholic divergence appears to be that Catholics wanted more children. Catholic women who bore their children during the crest of the baby boom reported an average of 3.32 wanted births in the 1970 National Fertility Study compared to 2.55 for non-Catholics. But among younger women the differential was a narrow 2.75 to 2.35 wanted births.[31] Other evidence points to a new convergence taking place as fertility continued to decline in the late 1960s and 1970s.[32] And by 1975, almost as large a proportion of Catholic as non-Catholic married couples were practicing contraception (76 versus 80 percent) and the proportions using the pill were the same in both groups (34 percent).[33]

Thus it appears that Catholics and blacks contributed proportionately somewhat more than other Americans to the baby boom. But more important than these slight aberrations is the fact that all groups did in fact participate in the boom and in the fertility troughs that preceded and followed it. It was indeed a "giant generation" and one that will continue to pose tremendous challenges for U.S. society as it moves through its life cycle. Later sections discuss some of these challenges, but first we take a look at how the baby boom cohort and its neighbors—the Depression and baby bust cohorts—are likely to fit demographically into the nation's future.

Measuring Future Cohort Dimensions

Measuring the pre-1980 demographic impact of the baby boom is simple. One merely traces the U.S. population by age and sex through each year of the 1960s and 1970s. Determining the post-1980 *numerical* impact of the baby boom is also quite straightforward. Its members and those of the 1930s Depression cohort and 1970s baby bust cohort are already born. Following their numbers through the various stages of the life cycle is a basic demographic exercise, given the relative stability of age-specific death rates, especially among younger segments of the population.

Future immigration must also be considered, but even that number, when broken down by age and sex, is unlikely to be large enough to distort projections of the *size* of the various cohorts as they go through life.

Defining the *proportion* of the population that the baby boom cohort will comprise after 1980 is more difficult since assumptions must be made about the numbers of children that will be born in the future in order to estimate the size of the total population at any given moment. And, as is well known, fertility is the most volatile of all demographic variables. Any variation in future fertility will not affect the *number* of people in the three generations that interest us. But such variations will change the *percentage* of the total population represented by these generations.

Assumptions for population projections

Population projections necessarily stem from stated assumptions about future demographic behavior. It is worthwhile considering that, although population forecasts or predictions can be wrong, population *projections* are by definition correct (given error-free computation). They merely project figures based on certain assumptions. However, these assumptions can be—and usually turn out to be—incorrect since the future is full of surprises. The closer the assumptions anticipate what will really happen, the more accurate the projections.

The assumptions underlying this *Bulletin's* projections of U.S. total population and thus the proportions made up of our three key cohorts are as follows. It is to be hoped that they prove to be close to eventual reality.

Fertility is assumed to increase slightly from the estimated 1979 total fertility rate of 1.85 births per woman to 2.0 by 1985 and remain at that level thereafter. Some discussions of the baby boom's impact rely on the Census Bureau's Series III projection which assumes a lower fertility rate of 1.7.* The results are more dramatic. However, in 1979, the total fertility rate rose slightly above the level it had been since 1974 and there is some evidence that it may inch up for several years.

Mortality reductions have been greater than expected during recent years. Indeed, the progress noted since 1973 in life expectancy has been dramatic and unanticipated. Mortality assumptions used in the 1977 Census Bureau population projections are already somewhat out of date. In this *Bulletin*, therefore, the progress projected to occur over 100 years in the Census Bureau projections has been compressed into 70 years. That is, average life expectancy at birth is projected to reach 72.8 years for males and 82.9 years for females in 2050—up from the current figures of 69.1 for males and 77.0 for females.

Net immigration is assumed to remain at 400,000 annually in current Census Bureau projections. In 1978, however, over 600,000 people entered the U.S. legally (many of them Indochinese refugees) and an unknown number departed. Still another unknown number entered illegally and some of these have left. Accurate figures on the annual flow of illegal migration in and out of the U.S. are simply unavailable although a recent working paper prepared by Census Bureau staff for the Select Commission on Immigration and Refugee Policy suggests that the number of illegal aliens *residing* in the U.S. in 1978 ranged between 3.5 and 5 mil-

*Current Census Bureau population projections assume a gradual transition from today's fertility levels to one of three different levels. Series I, the highest, assumes that women over the long run will average 2.7 children apiece. Series II assumes a long-run "replacement-level" total fertility rate of 2.1, that is, the level of fertility that would eventually balance births and deaths if mortality remains at current levels. Series III, the low projection, assumes a long-run total fertility rate of 1.7, slightly below the rate experienced in the U.S. since 1974.

lion, considerably lower than some previous estimates.[34] It seems reasonable to assume that future net immigration will be greater than 400,000 per year, especially if illegal movements are considered. Thus for this *Bulletin*, it is assumed that net immigration (the difference between people entering and leaving the country) will average 750,000 annually and that the age-sex distribution of the group will reflect that noted in recent years for legal immigrants, that is, relatively youthful and with more males than females.

In brief, in projecting the future size and proportions of the Depression, baby boom, and baby bust cohorts, we assume a total fertility rate of 2.0 births per woman (as from 1985), average life expectancy rising to 72.8 for males and 82.9 for females by 2050, and net immigration of 750,000 per year.

Future fertility behavior will not affect the size of these cohorts, though it will affect their proportions of the population. However, both mortality and migration behavior will affect the size as well as the proportions of the three cohorts.

Demographic Impact of the Baby Boom

Population age-sex distribution

The demographic importance of the baby boom is best seen through a series of population age-sex pyramids. Figure 4 (centerfold, pages 18-19) traces the changing shape of these for the U.S. from 1960 to 2050 as our three cohorts move through life from age 0-4 (bottom of the pyramid) to age 80 and up (top of the pyramid). In 1960, members of the Depression cohort (born 1930-39) are 20 to 29 years old. Their fewer numbers cause a narrow spot in the pyramids into the 21st century. In 2010, this cohort will be aged 70 to 79. The baby boom cohort of the 1950s stands out in all the pyramids, even in old age! In 1960 that cohort forms the base of the pyramid. The large numbers it represents are noted among those 10-19 in 1970; 40-49 in 2000, and, of course, 70-79 in 2030. In marked contrast is the baby bust cohort of the 1970s. Their 10 million fewer births than those which produced the baby boom cohort are reflected in the pinched-in base of the 1980 pyramid and throughout life this cohort is overshadowed by its giant older relative—the baby boom cohort.

Cohort impact on fertility, mortality, migration

Thus far, we have concentrated on how changes in fertility have contributed to these three startingly different cohorts. Interestingly, the sharp variations in the size of these cohorts in turn affects the demographic variables themselves.

The number of births has risen in recent years (as the crude birth rate is beginning to do) and this pattern will undoubtedly be maintained throughout the 1980s. This is the so-called "echo" effect of the baby boom. By 1985 there will be 20.5 million women in the prime childbearing ages of 20-29—2½ million more than in 1975 and 8 million more than in 1965. Thus annual *numbers* of births will rise during the 1980s even if the fertility *rate* remains at a low 1.7 to 2.0 births per woman.

As the baby boom generation ages, it helps push up the median age of the population—especially if fertility remains low. This artificially raises the crude death rate, the annual number of deaths per 1,000 population. Older people are more likely to die and with more of them in the population there are bound to be more deaths. When the baby boom cohort becomes elderly, crude death rates will go up even more as some 19 percent of the population will then be 65 or over compared to 11

percent in 1980.

Young adults, usually between 20 and 30, are more likely to move than older people. Again, the baby boom and baby bust cohorts affect the overall rate of mobility. During the 1980s, the baby boom generation will be in the peak 20-30 moving ages. Migration to the Sun Belt states, for example, will probably remain high as the baby boom generation passes through the stage of life when they are most likely to change residence.

In reverse, as the smaller baby bust cohort goes through life, annual numbers of births should drop off sharply, the U.S. population may become generally less mobile, and even the crude death rate will fall when this smaller cohort reaches the oldest ages and the outsize baby boom cohort has ceased to exist. Thus, while fertility is the prime contributor to the making of these generations, these cohorts in turn, by virtue of the extreme divergence in their sizes, contribute to wide variations in fertility, internal migration, and mortality.

Impact on non-demographic variables

One glance at the population pyramids in Figure 4 reveals clearly that a country's age composition is strongly affected by variations in cohort size. In turn, many socioeconomic variables are directly affected by this age distribution. For example, crime and unemployment rates are highest among teenagers and young adults under 25 and the passing of the baby boom bulge through these stages is blamed for the upturn in those statistics in the late 1960s and 1970s.[35]

Now at the start of the 1980s, the baby boom cohort has reached the ages of 20 to 29. There are 40 million of them, comprising 18 per cent of the population—up from 22 million people and 12 percent of the population in that age bracket in 1960. Some economists see this as the explanation for the low overall U.S. savings rate of 4.5 percent and high 19.1 ratio of consumer debt to disposable income in 1979. People in their 20s and early 30s tend to earn and save less and borrow more than any other group in order to buy homes and expensive durables such as appliances, furniture and automobiles. It could also explain the much publicized recent decline in U.S. labor productivity—worker output per hour worked. With the large supply of relatively cheap young workers, employers have been able to maintain production without investing in labor-saving equipment.[36] There is no doubt that escalating inflation (up to an annual rate of over 18 percent in March 1980) is due to high current consumer demand and lower productivity, so the maturing of the extra-large baby boom cohort into the 20-29 year-old age range may be a prime factor here.

Changes in age composition affect all aspects of the business world. Demands for baby products fell off so much in the 1970s with the advent of the baby bust generation that Johnson and Johnson began pitching their advertisements to young adults, going so far as to employ professional football players as their "salesmen." Gerber Baby Foods has set up a life insurance division that boasts, "Gerbers now babies the over-50s." Insurance sales are greatly affected by age composition. A recent *American Demographics* article notes:

> "Almost one-third of all life insurance purchases are made by people in the 25-34 age group, and insureds in this age group spend more dollars on life insurance than others. Over 60 percent of those in their 30s pay more than $260 annually for life insurance, while payments below $120 per year are concentrated among the over-60 age group. In the 1980s, the bulk of the population will be in their 30s. As a result, the life insurance industry can expect sales to grow and the size of policies purchased to become larger."[37]

The U.S. divorce rate—currently among the world's highest at 5.3 per

1,000 population (in 1979)—is likely to remain high as the baby boom generation passes through their 30s and early 40s, the ages when divorce is most frequent. And when this large cohort reaches the oldest ages, the stage at which medical needs are greatest, the nation's total medical bill is likely to surge far over its current level ($192.4 billion in 1978), even accounting for inflation.

Impact on Cohort Members

While their varying numbers distort the population's age composition and thus contribute to many social problems, attention should also be given to the *individuals* who comprise the Depression, baby boom, and baby bust cohorts. How are the members of these three generations of Americans affected by being part of such small or large cohorts?

The "good times" cohort

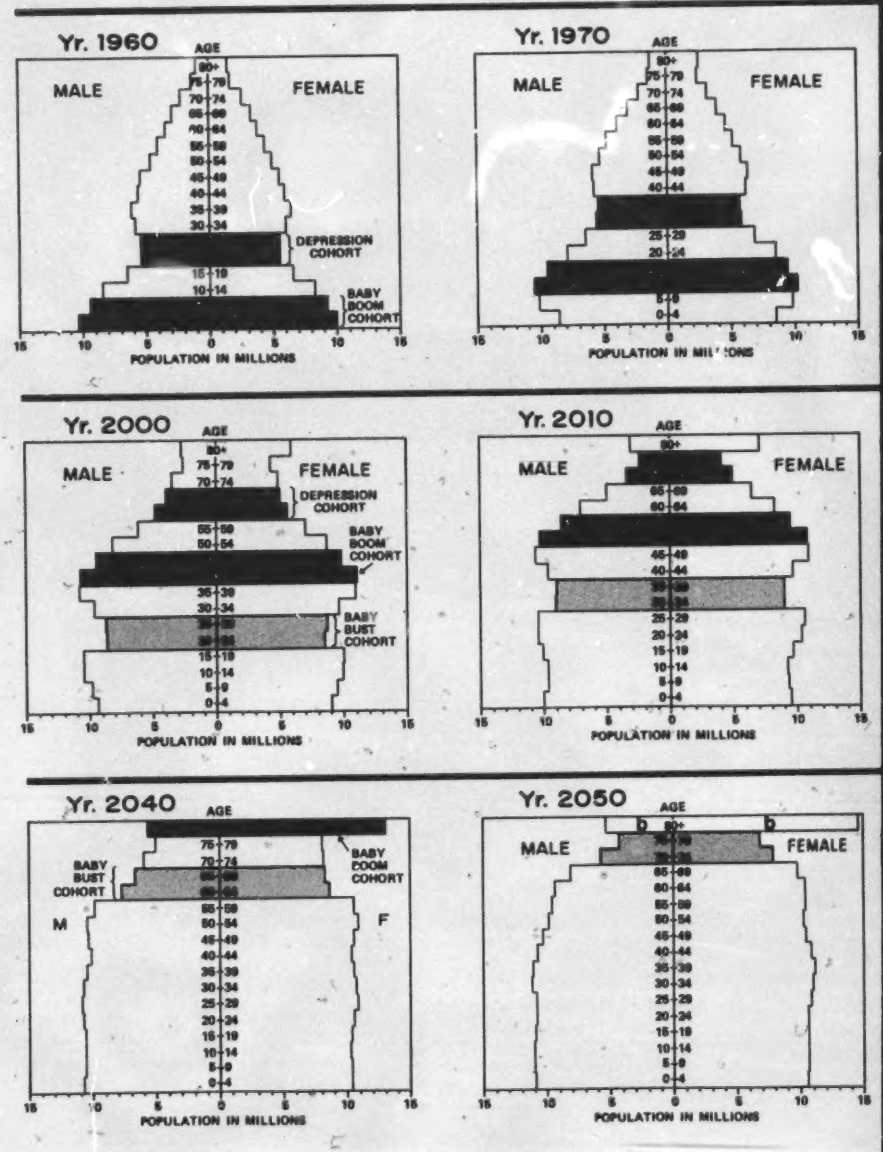
People born in the 1930s have been labeled the "good times" cohort. Although the Depression hung over their early years, this cohort has reaped the social and economic benefits of being smaller than the cohort that preceded it as well as the cohort that came after. Until the 1970s, it was the only such case in U.S. demographic history. During the 1930s, there were about four-and-a-quarter million fewer births than in the 1920s, and the good times cohort was followed by the baby boom cohort. Sociologist Carl Harter describes their advantages:

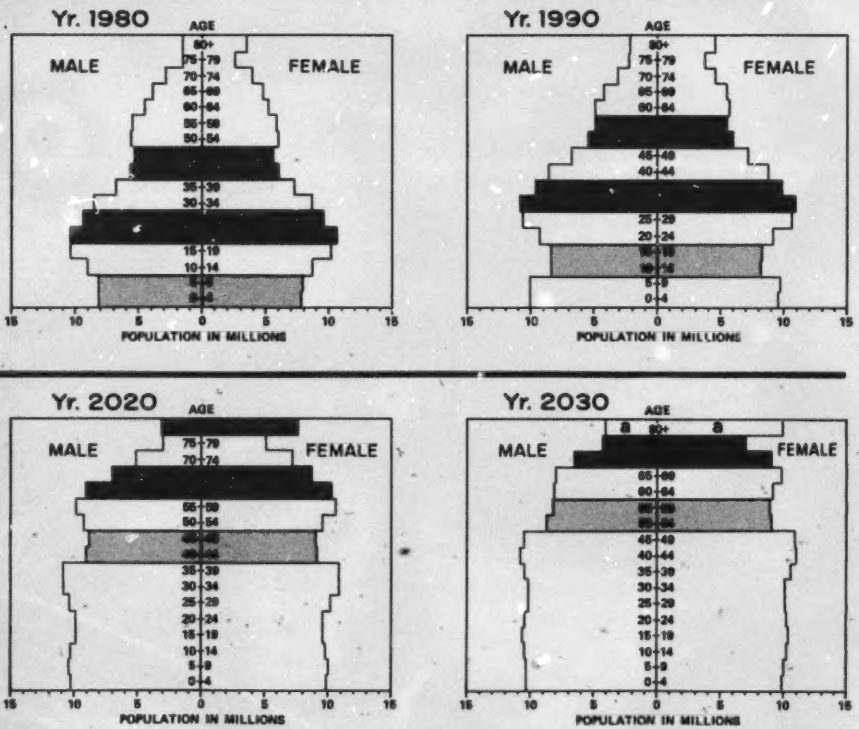
"By virtue of their smaller number, the thirties cohort, upon encountering each important life cycle event, have experienced relative abundance—a legacy from the larger cohort that preceded them. . . . Relatively speaking, in all their important life cycle events, the 1930s cohort has 'had it made.' In 1950, when the thirties cohort was age 11-20, there were about a quarter million fewer 15-years-olds than there had been in 1940. Insofar as the number of high school classrooms, glee clubs, athletic teams, debate squads, class officers, etc., had not diminished, then the 1950 fifteen-year-old had a greater chance than did the 1940 fifteen-year-old of being in a smaller class, of being a class officer, of being a member of the glee club and athletic team and debate squad, etc. Similarly, in 1960, when the thirties cohort was 21-39 they required fewer new jobs and housing units than did their predecessors ten years earlier."[38]

The baby boom cohort

The baby boom cohort has not been as fortunate as its predecessor. Because of its much greater numbers, this group can expect problems and frustrations as it passes through the life cycle. Many are now in or just graduated from college. They have had to cope with overcrowded classrooms and teacher shortages through all their years of schooling. Many have entered the labor force, only to discover that there are not enough suitable jobs to go ground. Once employed, they will earn less relative to older workers than young workers normally do. In 1968, male college graduates aged 45 to 54 earned only 38 percent more than those 20 years younger. In 1978, the difference was up to 63 percent, largely because experienced older workers had become relatively scarce with so many younger people entering the work world.[39] Many members of the baby boom cohort are now seeking housing, which is scarce in relation to the demand and thus increasingly expensive. When they reach the peak of their employment years (30-44), there will be over one and a half times as many of them as there will be people aged 45-59. "Consequently, job advancement opportunities will be relatively fewer and competition for advancement far greater."[40] When they reach retirement age, the extra demands on the Social Security system could result in strains between the baby boom

Figure 4. Progress of Depression Cohort, Baby Boom Cohort, and Baby Bust Cohort Through U.S. Population Age-Sex Pyramid: 1960-2050





Sources: 1980-1970: U.S. Bureau of the Census, *1970 U.S. Census of Population: General Population Characteristics, United States Summary*, Vol. I, PC(1)-B1, 1972, Table 52; and 1980-2050: Special unpublished tabulations prepared by Leon F. Bouvier for the Select Commission on Immigration and Refugee Policy, 1980

[a] Includes survivors of Depression cohort.
[b] Includes survivors of baby boom cohort.

Note: 1980-2050 projections assume a total fertility rate rising to 2.0 births per woman by 1985 and constant thereafter; life expectancy at birth rising to 72.8 years for males and 82.9 years for females by 2050; net immigration constant at 750,000 persons per year.

cohort and the younger persons who have to finance the system.

Clearly it will not be an easy path through the many phases of the life cycle for the baby boom cohort. "Social discontent will continue to be generated by the baby boom cohort. It seems as though wherever they are, it's raining."[41]

The baby bust cohort

The baby bust cohort of the 1970s should have a much easier passage through life. Like the Depression cohort, "Not only will there be fewer of them competing for jobs, services, and attention, but there also will have been an increase in public services and provisions made to accommodate the demands of the larger number of people that preceded them. They will be the beneficiaries of the baby boom."[42]

But this group could also be victims of the baby boom in their chances for career advancement. So many people only 10-15 years older will be employed that promotions may be a long time in coming. Demographer Conrad Taeuber suggests that middle-level positions may have to be created as "holding patterns" until the field is cleared of the older occupants of high-level jobs. Only when the baby boom cohort retires will senior positions finally be opened to those in their 50s.

All in all, however, insofar as demography shapes life chances, the baby bust cohort will enjoy an advantageous position, similar to that of the "good times" cohort. Indeed, it may be a little better off. The good times cohort was just a little smaller than its predecessor and much smaller than its successor. But the baby bust cohort is much smaller than its predecessor and will probably be a little smaller than its successor—the "echo effect" children of the baby boom.

It is clear that being a member of one of these cohorts can make a significant difference in the chances for success in life. This is not to suggest any form of demographic determinism. Yet being born a member of a large or a small cohort does alter one's odds for succeeding.

Baby Boom's Problems for Society

Similar ups and downs will dog American society with the passing through of the vastly different Depression, baby boom, and baby bust generations. Manual Plotkin, former director of the Census Bureau, points out the problem.

"The people born during the peak of the [baby] boom, the 1950s and early 1960s, will continue to be the largest population group throughout most of their lives. As this large group passes through each of these ages, the institutions that deal with population of particular ages will undergo the strain of rapid expansion and, a decade or two later, the often more painful task of precipitous retrenchment."[43]

It is perhaps safe to say that there are no societal problems, present or future, that do not have a demographic dimension. And for the U.S. today, the major demographic dimension is the existence of a very large cohort preceded and succeeded by small cohorts. Economist Robert Samuelson puts it this way: "You cannot understand economics or politics today without understanding the impact of the 'baby boom'."[44]

Many social scientists, planners and politicians have awakened to this simple reality only recently. The "discovery of demographics" showed up in President Carter's 1980 economic budget. "Demographic changes have substantial effects on the budget, some of which can

*Some of the material in this section is derived from Robert H. Weller, and Leon F. Bouvier, *Population: Demography and Policy* (New York: St. Martin's Press, forthcoming 1981).

be anticipated. For example, we can estimate fairly accurately the number of people reaching retirement age a few years hence."[45]

At the heart of this new concern are two basic demographic concepts: the age structure of a population as a whole and the accompanying notion of cohorts, born in various decades. As the cohorts born in the 1930s, the 1950s, and the 1970s pass through life, they are disturbing the age structure of the U.S. population in the sense that the "normal" pyramidical pattern of a stable population is being disrupted by a cohort that is "too large" and two that are "too small." This is well illustrated in Figure 4. Disturbances in the age structure in turn can and do have tremendous impact on the society. Every institution will be affected. Each must plan in order to avoid the potential difficulties as these generations reach the ages with which it deals. The cohorts are born; they will go through all the stages of the life cycle. Fortunately, we know the numbers involved and, if we wish, can plan accordingly. As we will see below, that has not always been the case.

Education

Education as a social institution has perhaps been more affected by fertility variations than most other American institutions. The structure shifts resulting from the fertility fluctuations of the past 40 years have inevitably created substantial variations in school enrollment as well as in the number of available teachers. All three cohorts are involved in this problem.

In the late 1950s and 1960s, school enrollments soared as the baby boom cohort entered primary school and, later, secondary school. There they were taught, at least in part, by the relatively scarce members of the Depression generation. The elementary school age population (5-13) grew from 23 million in 1950 to 37 million in 1970. Shortages of teachers and classrooms plagued elementary schools as early as the mid-1950s, forcing them into double and even triple sessions. By the early 1960s, secondary schools were faced with similar problems. The high school population doubled in size between 1950 and 1975.

Soaring enrollments as the baby boom cohort reached college age helped fuel the student unrest of the late 1960s and early 1970s.

Colleges were next. Enrollments began skyrocketing in the mid-1960s, both from the sheer numbers of baby boomers and from the increased proportion of young people going to college. College students leaped from 3.2 million in 1960 to 9 million in 1975. Most certainly this dramatic demographic change helped fuel the student unrest of the late 1960s. The entire college environment changed in an incredibly short period, and that, coupled with the struggle over civil rights and pain of the Vietnam War, combined to give us the turbulent 1960s.

School planners were totally unprepared for the influx of youngsters enter-

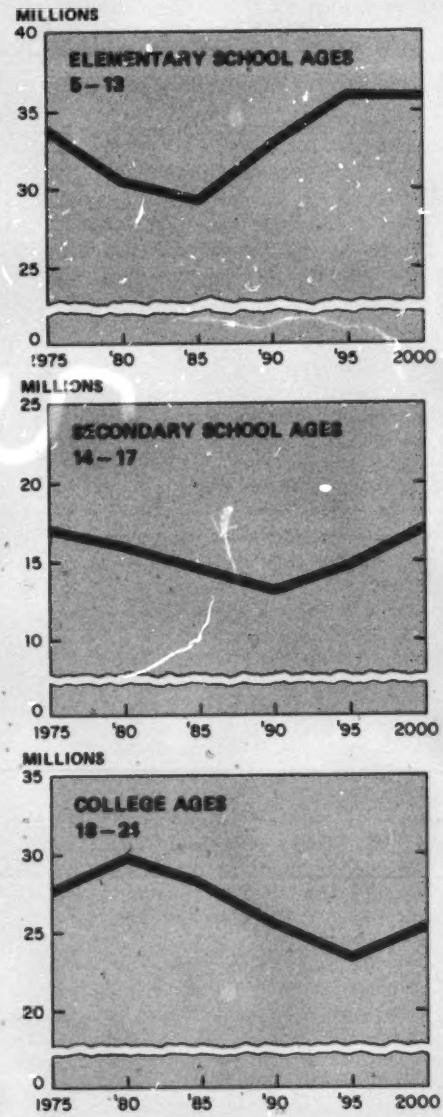
ing school. In the early 1950s, few experts thought the baby boom would last into the late 1950s and early 1960s and administrators were not warned until it was too late. By the time new training schools had graduated enough teachers and massive building programs, voted unprotestingly by local taxpayers, had produced enough schools, the crest of the baby boom cohort was about to pass out of the school ages.[46]

Today, the situation has been turned around. There is a shortage of students and an excess of both teachers and school buildings. Again this can be explained demographically. Today's teachers are numerous not only because they come predominantly from the baby boom cohort but also because they were encouraged to become teachers by the shortages they themselves experienced while in school. On the other hand, the "shortage" of students in elementary schools—and, soon to be, in secondary schools—results from the low fertility of the 1970s. Now in 1980 there are fewer people aged 5-13 than there were in 1970 or even in 1965, and as Figure 5 shows, that number will fall even more by 1985 before growing slightly. The secondary school age population will follow a similar path a few years later:

> "The most notable fact is that each of the three school age groups is going to go through cycles in which the population declines for 10 to 15 years, and finally rises again. Thus the primary school ages can expect declines between now and 1985, marked gains between 1985 and 1995, further declines from 1995 to 2010, and finally gains after 2010. These same trends will have an impact on the secondary school population and college age populations about 5 and 10 years after they affect the primary ages."[47]

These temporary rises in enrollment that will occur later in the 1980s and on into the 1990s reflect the echo effect of the baby boom. Annual births have already turned up slightly (from 3.1 million in 1973—the bottom of the baby

Figure 5. Projected U.S. School Age Population: 1975-2000



Source: U.S. House of Representatives, Select Committee on Population, *Domestic Consequences of United States Population Change*, 95th Cong., 2nd sess., 1978, Figure 11, p. 45.

bust—to 3.5 million in 1979) and are expected to continue rising for some time, resulting in some increase in the number of children of school age five to ten years later. Ironically, the much-maligned teaching profession may offer good job possibilities in the not-too-distant future as a result of both the echo effect and the fact that not many college students are now entering that profession because of their perception of "not enough jobs."

The present combination of too many resources—faculties and facilities alike—and projections of enrollment increases in the relatively near future poses a dilemma for policymakers. It may be shortsighted to dispose of underutilized school buildings, knowing that enrollments will soon climb somewhat. Clearly, *flexibility* should be the guideline for policymaking, at least for the present. As to the long-run problem, some have suggested simply to have more babies. A larger school age population would, of course, create more jobs for teachers. However, it would also signal another population explosion—a dismaying alternative. A more productive alternative would be to improve the entire educational system by translating the decline in number of students into more resources per student.

Demographer Lincoln Day recently addressed this question:

> "Will this reduction in the number and proportions of school age children lead to an improvement in educational quality (however one cares to define this), or will it be seized upon, instead, as an opportunity to cut costs and allocate resources elsewhere?"[48]

To judge from reports of school closings across the country since the mid-1970s, school boards are overwhelmingly choosing the latter course of action.

Such decisions are unfortunate, not only for the children but also for American society itself. The cohort born in the 1970s—about 33 million—will probably prove to be the smallest cohort in the second half of the 20th century. It follows the massive baby boom cohort and will precede the echo cohort produced by the baby boom cohort as it reaches childbearing ages. Proportionately speaking, the number reaching the early stages of the professional-business part of the life cycle in about 2000 will be small. The nation cannot afford to waste any of this potential talent, rare as the source will be. It would be wise for society to ensure that this generation of the 1970s and early 1980s receives the best possible education to better train them for their adult responsibilities. As Alan Pifer suggests, in an article aptly entitled "Don't Forget the Children":

> "Every child alive today or born in the years just ahead, whether male, female, black, white, Hispanic or otherwise, will be a scarce resource and a precious asset as an adult in the early part of the next century. At that time, the nation's standard of living, its capacity to defend itself—perhaps its very viability as a nation—will be almost wholly dependent on the small contingent of men and women who are today's children."[49]

Household formation

Households, which now number approximately 80 million, grew by 15.5 million during the 1970s. This represents a 20 percent increase in just ten years. During the same period, the U.S. population grew by only 9 percent.

The baby boom generation are now young adults and are setting up their own households. This partly explains the vast increase in households. But there are other demographic factors involved. Families are getting smaller. Fertility has been falling; fewer young married couples live with their parents; and there are more one-parent families. Also, there are more single adults. Young people are postponing marriage, yet they leave their parental homes at an earlier age to set up housekeeping than past generations did. Divorce is becoming more common and each divorce

usually adds yet another household. Annual divorces went over a million in 1975, and by 1979 were up to 1.2 million. Finally, people are living longer and more of the elderly are maintaining their own homes.[50] Thus, demographic factors, especially the baby boom, are having a significant impact on one of society's most important institutions—the home.

Many changes in the *nature* of household composition have occurred in recent years and will continue to occur in the future, attributable in large part to the factors listed above. Non-family households have increased at a more rapid rate than have family households—66 percent compared to 12 percent over the 1970 decade (see Figure 6). Most of this increase among non-family households is accounted for by young people who have never been married or who are separated or divorced.[51]

A very different profile of households emerges as we enter the 1980s. In 1970, 81 percent of all U.S. households were family types—70 percent maintained by married couples and 11 percent by single parents. In 1979, only 61 percent of all households included married couples and 13 percent were headed by single parents. Over a quarter of all households were classified as non-familial (Figure 6).

Households will continue to increase rapidly. The Census Bureau foresees over 96 million households by 1990—another one-decade gain of about one-fifth. By the turn of the century that number will undoubtedly surpass 110 million. In 1990, perhaps as few as 57 percent of all households will be husband-wife types. Another 14 percent will be headed by a single parent and the remaining 29 percent will be non-family households. These projections reflect the changes that have been taking place in recent years in age at marriage, divorce, family size and, of course, changes in age composition resulting from the baby boom and baby bust generations. Much of the future size and characteristics of households is dependent not only on the numbers but also on the behavior of the large baby boom cohort:

"The behavior of this generation as it passes through its 20s and 30s [about 1975 to 1994], the traditional years for forming households, is not easy to predict. The decisions members of this group make about marriage, divorce and fertility should have a profound impact on what future households will be like."[52]

This mammoth increase in household formation is of course directly related to the consumer demand for housing. As economist William Serow points out:

"Today, the rate of household formation—which most directly influences the growth rate of demand for housing—is much greater than the rate of population growth because of the large number of young adults in the population and the increasing incidence of divorce. While the former is essentially transitory, another consequence of the baby boom, the latter may well be permanent. Slower population growth is also likely to affect the composition of housing demand (smaller units with more convenience and luxury features), as well as to provide additional demand for second homes."[53]

Regardless of the *types* of housing desired by the new consumers of the 1980s one thing is certain: the large number of such new potential home buyers is a prime factor in the spiraling cost of housing which shares with soaring energy costs the leading role in fueling current inflation. The *Wall Street Journal* comments: "Now the big part of the [baby boom] bulge is between 20 and 30 years of age, the usual period of household formation, and it is beginning to dominate the housing market."[54] During the 1970s, 32 million Americans reached age 30—a milestone age for home purchasing. About 42 million will turn 30 during the 1980s. There will probably be little drop in housing demand until the 1990s when

the baby bust cohort enters the market.

Quoting economist Dwight Jaffe, the *Wall Street Journal* continues:

"For the [building] industry, the demographic factors are the most positive they've been in a long time. He (Jaffe) expects an average of slightly more than two million housing starts a year over the next 10 years, compared with an average of about 1.7 million over the past 10. 'The industry is ratcheted up a whole notch. The 1980s are going to be glorious.'"

These optimistic views are not subdued by the prospect of ever higher interest rates on borrowing and tighter credit regulations. It will not be enough to flatten the rise, contends Kenneth Rosen, Princeton economist, "even high interest rates aren't likely to kill this boom because it's demographically based."

The giant generation as it enters the stage of life when household formation is most likely is thus having a tremendous impact on that particular aspect of society. The impact stems not only from its sheer size but also from its own demographic behavior—low fertility, later age at marriage, increased female labor force participation. Together these factors are contributing to major changes in the nation's family and household makeup as well as booming sales for the housing industry and its subsidiaries such as furniture and appliance manufacturers.

The labor force and employment

During the 1976 presidential campaign, candidate Jimmy Carter argued that the number of unemployed people had increased during the Nixon-Ford years. The then incumbent president, Gerald Ford, countered that more people were employed during those years than ever before in history. Many voters saw this exchange as just another example of campaign rhetoric, but both candidates were telling the truth.

Population increases result in more

Figure 6. Number of U.S. Households by Type: 1970 and 1979

Sources Note: Adapted with permission from Arthur J. Norton and Paul C. Glick, "What's Happening to Households?" *American Demographics*, Vol. 1, No. 3 (March 1979) p. 20, updated to 1979 from U.S. Bureau of the Census, "Households and Families by Type: March 1979 (Advance Report)," *Current Population Reports*, Series P-20, No. 345, October 1979.

people being available for employment. Most of them are actually working. However, by 1976 the baby boom had greatly expanded the proportion of teenagers and young adults in the population and it is in these groups that unemployment rates tend to be greatest. Thus the number of unemployed people increased at the same time that the number of employed persons also increased.

Since 1976, however, there has been a shift in this trend. In the election month of that year, November 1976, the U.S. labor force stood at 95.8 million people—88.3 million of them employed and 7.5 million unemployed. The overall unemployment rate was thus 7.8 percent. In March 1980, the total work force was up to a near record 104.1 million. Employed persons had increased by nearly 10 million to 97.7 million, while both the number of unemployed (6.4 million) and the unemployment rate (6.2 percent) were well below the 1976 level.[55]

In response to the baby boom's arrival at working age, the U.S. labor force added an average of over 2 million people a year from 1968 to 1978. Most of the new entrants were young people. By 1978, 58 percent of all teenagers were either working or looking for work—nearly 5 million more than in 1960. Inexperienced teenagers take longer to find work and switch jobs more often and thus force up the general unemployment rate. A recent Bureau of Labor Statistics report noted that the U.S. economy had created 12 million new jobs from 1974 to 1977, but unemployment was reduced by only 2 million because so many of the new jobs were taken by new entrants.[56]

The pressure of the baby boomers on the job market during the 1970s was compounded by an enormous influx of women. Labor force participation rates for women soared in part because of the baby bust fertility decline. The increase is startling: in 1960, 35 percent of all women aged 16 and over were working or actively seeking employment. Today in 1980, over half of all women are in that category. Nineteen million women joined the work force between 1960 and 1974, accounting for 60 percent of its growth.[57]

An outstanding feature of women's entry into the labor force has been the increased participation of married women, particularly those with preschool age children. In the past, these women were least likely to be employed, yet since 1965 the most rapid increases in rates of labor force participation have been among women with children under 6 years of age. Evidently factors which once kept women off the job market such as marriage and/or young children are now being outweighed by inflationary pressures on family budgets and women's desires for their own occupation and income.

With over half of women already working and the bulk of the baby boom cohort due to move beyond the job-entry stage, labor force growth will probably decline during the 1980s. Economist Alan Greenspan puts the likely rate of increase during the next decade at 1.7 million persons per year or 1.6 percent, somewhat slower than in the 1970s. Even that growth rate itself will fall through the decade from 2.3 in 1977 to 1.2 in 1990. He comments:

> "In any case, the tapering off of new entrants leads to the assurance of a more mature work force in the 1980s. By 1990, seasoned workers in the prime of their working lives, that is between the ages of 25 and 54, will constitute 70 percent of the labor force. Women will be contributing a lot, in different ways, to the accretion of experience. Right now, women have fewer years on their current job than men, especially in the older age groups. But that gap is already starting to narrow. An increase in early retirement is removing men with longer tenures, while women's working careers are getting longer than they used to be."[58]

The changing age structure of the near future should bring some good news, economically speaking. The num-

ber of elderly will increase (though their proportion of the population will grow only slightly for some time) while the number of infants and children will decline (assuming continued low fertility). Thus there will be more workers and fewer people dependent on them. A decrease in the number of dependents should cause per capita income to rise even in the absence of any increase in real earnings. But there is reason to anticipate that declining population growth will increase real wages in the next few years. Economist William Serow notes:

"First, as the baby boom youth pass into middle age, their unemployment rate will decrease and their earning level will increase. Second, because smaller cohorts will replace them at the entry level, that means the need to devote a large share of capital to equip them will lessen. If the amount of capital available per worker increases, and with it the productivity per worker, real wages could rise without contributing to inflation."[59]

These labor force forecasts generally assume continued low fertility and continued participation of married women. Changes in these, as well as in the size and age composition of the immigration stream, could substantially affect both the size of the labor force and its age composition, especially after 1990. In any event, it is clear that the U.S. economy will have to generate still more millions of jobs to cope with newly available job seekers who will continue to flood into the labor market over the next two decades. Given high rates of inflation and low rates of investment, meeting this need will prove difficult.

Political institutions

In November 1980 when the presidential election takes place, people aged 18-29 will represent the cohort born between 1951 and 1962—the heart of the baby boom. These under-30 potential voters will comprise 30 percent of the potential voting population—the highest proportion ever for this age group and the highest it may ever be. Nevertheless, neither political party appears to be emphasizing a youth-oriented platform. Indeed, the emphasis seems to be aimed at attracting older voters.

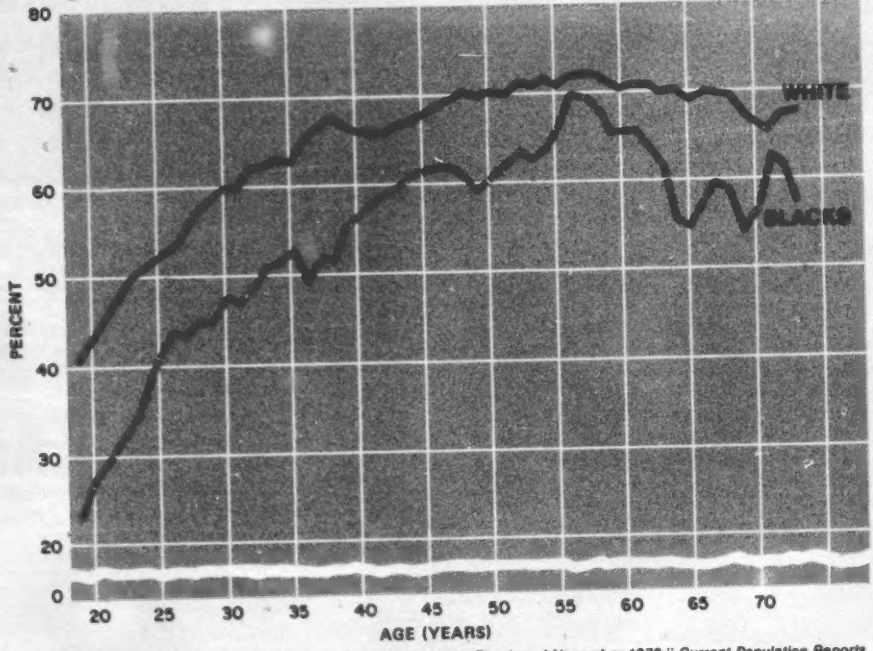
The reason is relatively simple. Young adults and teenagers are not as likely to vote as are their older counterparts. Figure 7 (page 28) shows the proportion of people of voting age (18 and over) who voted in the most recent presidential election of November 1976. Only 38 percent of the people aged 18-19 voted; about half of those 25-29 voted; but 70 percent of those 55-64 did so. The situation was even more dismal in the 1978 Congressional election. Only 18 percent of the 18-19 age group voted and about a third of those 25-29. But 61 percent of the 55-64 group voted. There is a direct correlation between age and the propensity to vote—at least up to age 65.

If such a correlation is maintained, it will be another 20 years before the baby boom generation has any real impact on the election process in the United States. However, should this potentially powerful voting block be motivated because of some specific issue perceived as being directly related to its interests, it could possibly become the prime force in the election—and of course in the defeat—of any particular presidential candidate.

The impact of birth cohorts on political institutions cannot be discussed without some mention of the military—that part of the political institution apparently responsible for the maintenance of a peaceful co-existence with other nations.

The most likely group to be called up for military service is that between the ages of 18 and 24. Census Bureau estimates for July 1, 1979, indicate a population aged 18-24 of 29,285,000. These people were born between 1954 and 1961—peak baby boom years. The number of people aged 18-24 will drop substantially over the next two decades.

Figure 7. Percentage of Persons of Voting Age Reporting Voting in November 1976 Election



Source: U.S. Bureau of the Census, "Voting and Registration in the Election of November 1976," *Current Population Reports*, Series P-20, No. 322, March 1978, cover chart.

By 1990, the 18-24 population will have fallen to 25,149,000—14 percent below that of 1979. By 2000, the Census Bureau projects a slight further fall to about 24,600,000. The only way that number could be raised would be through increased immigration of persons young enough to be in the 18-24 age bracket in 1990 or 2000. One would have to also assume that many of these immigrants would be willing to serve in the U.S. armed forces.

Of course, not everyone aged 18-24 serves in the military even in wartime. While the number of women recruits has gone up in recent years, women still comprised only a small 7 percent of the armed forces at the end of 1979 (154,800 of a total of 2.3 million).[60] The most obvious source for expanding the size of the armed services would seem to lie there—encouraging female recruitment to compenstate for the declining overall number of people aged 18-24, the result of the changes in U.S. fertility between the 1960s and the 1970s. This alternative appears unlikely in the near future, however, considering the negative public reaction in early 1980 which forced President Carter to drop the proposal that young women as well as men should register for a potential draft.

The probability of voting among young adults may be related to the probability of being drafted into the military service. Currently the pool of potential draftees is large. But it will soon begin

to shrink. The pool of potential young voters is now also large. Is a military draft the kind of issue that could unite this potential voting block?

The elderly and Social Security

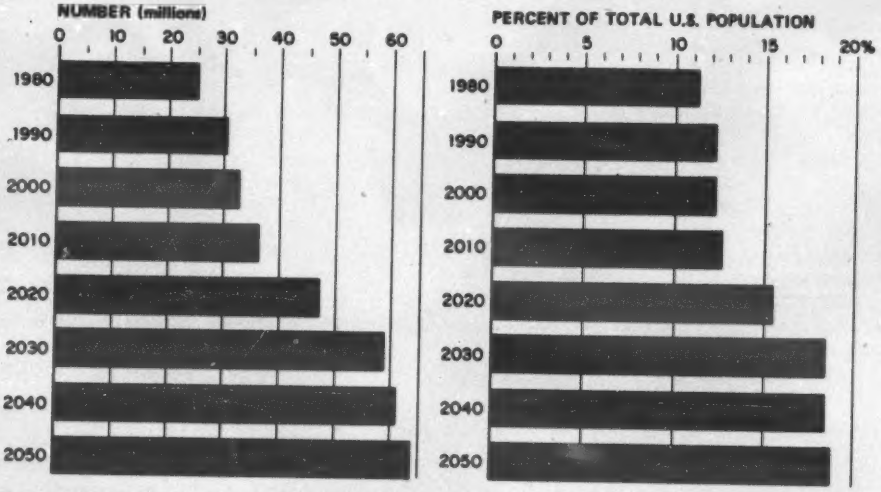
Much has been written about the coming "senior boom." Unfortunately, much of the speculation is incorrect. Indeed, misinformation has been so rampant that the Census Bureau found it necessary to comment on this issue in a recent report on the elderly:

"Obviously statements sometimes made in the press and elsewhere that over one-third of the population of the United States will be over 65 years in another quarter to half a century are unfounded. This would be 'possible' only if fertility continued at replacement or sub-replacement level and death rates were reduced to zero or near zero in the next few years."[61]

Currently, there are about 25 million people aged 65 and over in the U.S. That number will ease up to about 31 million at the turn of the century. Only after 2010 will the number escalate and reach perhaps 59 million by 2030 (see Figure 8). This growth pattern of the elderly population reflects the size of the Depression cohort as well as that of its successor of the baby boom. Indeed, the decennial percent increase in the population 65 and over will be very small in the 1990s, a consequence of the low fertility of the 1930s. It will soar between 2010 and 2020 and between 2020 and 2030 as the baby boom generation enters the last stage of its life cycle.

Up to 65 years in the future, we can be quite certain of the number of elderly persons in the total U.S. population. More difficult is to project what proportion they will comprise of that total as this depends on future fertility behavior. Higher fertility means a lower proportion of elderly; lower fertility means a higher

Figure 8. Projected Number and Proportion of Persons Aged 65 and Over in the U.S. Population: 1980-2050



Source: Special unpublished tabulations prepared by Leon F. Bouvier for the Select Commission on Immigration and Refugee Policy, 1980. For fertility, mortality, and migration assumptions underlying these projections, see Figure 4.

proportion of 65-year-olds and older. According to the assumptions of this *Bulletin*, the elderly will make up about 19 percent of the total U.S. population of 2030—almost double the 11 percent of 1980 (Figure 8). In other words, 50 years from now nearly one of every five Americans will be aged 65 or more compared to just over one in ten today.

As the baby boom cohort moves through its retirement years it will create one last major disturbance for society. The generation which caused an upheaval already in the late 1950s upon entering the school system will not simply disappear quietly. Its most significant disturbance for society will probably come in its final stage of life. Furthermore, because of both its sheer size and its gains from increased life expectancy, growth within the elderly baby boom cohort will be overwhelmingly among those aged 75 and over. Thus the elderly group itself will grow older and in so doing will prolong the cohort's existence.

Increased proportions of the elderly will require changes in consumption patterns as well as a vast reordering of public priorities. Goods and services which are used more with advancing age will be in increased demand: nursing homes, hospitals, pharmaceutical products, group housing arrangements, homes for the aged, etc. Judging solely by demographic considerations, not only will total spending on the elderly rise but also the *average* spent per person aged 65 and over will go up because there will be more of them in the very oldest, most dependent ages.

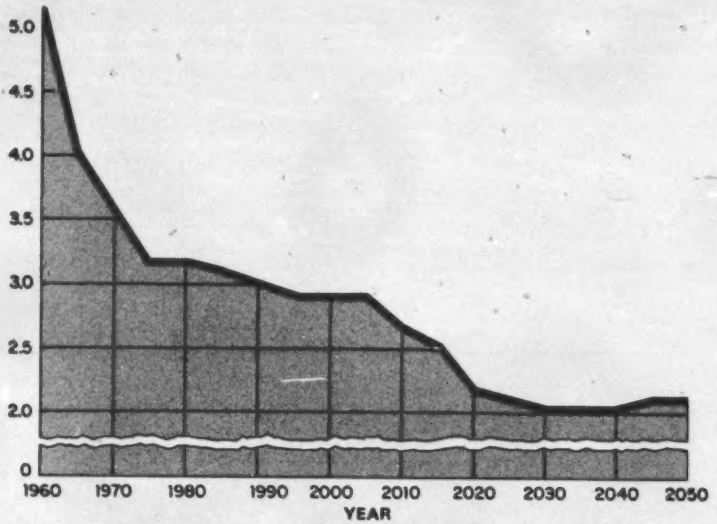
The changes in public priorities are less visible but perhaps more dramatic. Increasingly, we speak of the "graying" of the U.S. budget because of the increased proportion of funds earmarked to serve the elderly. In 1969, the elderly received 17 percent of the federal budget. In fiscal year 1981, one quarter of the total federal budget will go for support of older people and their dependendents—an amount larger than requested for any other single category of federal expenditure including defense. This share might reach 40 percent in 2025 when the baby boom elderly population is at its peak, according to former HEW Secretary Joseph Califano.[62]

Looming large among the potential problems associated with future growth of the aged population is the Social Security system. Currently the system is experiencing financial problems. One reason, though not the only one, is the increasing number of 65 year-olds and older. These problems will intensify after 2010 when that age group is taken over by the baby boom cohort. The middle-aged persons who will then be working and paying into the Social Security pool will be those of the smaller baby bust cohort. Thus relatively fewer economically active people will be paying for the "welfare" of an increased number of elderly. An inter-generational quarrel is not impossible, given the situation.

Looking only at the elderly population overstates the problems and greatly oversimplifies the issue of dependency. As Figure 9 shows, the massive growth in the elderly population in the early part of the next century does translate into a falling number of persons paying Social Security payroll taxes in relation to each elderly beneficiary. But if fertility remains low, the proportion of dependent children in the total population will go down which will compenstate for the increase in the elderly population. Rather than concentrate solely on the future proportions aged 65 and older, economic planners should be looking at the total "dependency ratio." Doing so yields a more complete picture.

In 1980 there were 64.7 people of dependent age (under 18 or 65 and over) for every 100 persons in the working ages (18-64). If fertility stays at 1.8 births per woman and net immigration at 750,000 per year, by 2000 the dependency ratio will have *dropped* to 58.6. Even in 2020 when the baby boom

Figure 9. Projected Number of Persons Paying Social Security Payroll Taxes per Beneficiary Aged 65 and Over: U.S., 1960-2050



Source: U.S. House of Representatives, Select Committee on Population, *Domestic Consequences of United States Population Change*, 95th Cong., 2nd sess., 1978, Figure 13, p. 73.

cohort begins to retire, the total dependency ratio would only be 61.2—still below the 1980 level. Indeed, if fertility increases to 2.0, in line with our earlier assumption, the dependency ratio of 2020 would also be below that of 1980—64.3 versus 64.7.

Although the growing elderly population will pose difficulties for society, a major problem may well be that of developing the will and commitment necessary to switch the emphasis from expenditures for the young to expenditures for the aged. Making such a shift is far from simple. Political difficulties can be foreseen when it is suggested that the two age groups are interchangeable. Currently public expenditures to support an elderly person are three times what they are per youth. Also much public spending on young people is for education which is financed largely by state and local taxes, whereas most public spending for the elderly comes from federal funds. An increasing proportion of older persons could thus raise the issue of federal versus state and local responsibilities and spending.[63]

Obviously major alterations in our overall economic, social, and political systems will have to occur if we are to provide adequate care and shelter for the senior citizens of 40 years hence. Fortunately there is time to plan for these changes. Because the baby boom cohort is now entering the labor force and will continue to swell the ranks of the employed for the next 20 years, there will be no marked increase in the ratio of elderly persons to working-age population until after 2010. Only then when the baby boom generation becomes the senior boom will its place in the work force be taken by the baby bust

cohort. The ratio of people 65 and over to the active population will rise rapidly to a peak in 2030. The changes will be drastic and it is not too early to begin adequate preparations for their coming.

The Future: Dismal or Happy?

It might seem reasonable to conclude that all will not go well with U.S. society until the giant baby boom generation passes out of existence around the middle of the 21st century. There can be no denying the many disturbances that emanate from this interruption of the long historical decline in fertility—a trend resumed with the somewhat misnamed baby bust of the 1970s. Clearly the sudden "dumping" of an extraordinarily large number of people of a specific age on the society necessarily results in certain upheavals in that society's institutions.

All the news is not bleak, however. The baby room generation is on the verge of entering the most productive phase of life. It has all but completed the earliest troublesome phases and U.S. society has survived! That the baby bust generation follows is also reason to be optimistic about the future.

As the number of people diminish in those troublesome early life stages—school age, early adulthood, family formation—the problems attendant to those ages will also decrease.

Further, as the baby boom cohort sheds its "dependent" label and becomes "economically active," it should cease being a burden on society. Whereas having "too many children of school age" was a problem for society, having "too many active adults" will be a boon for the society. The dependency ratio will fall as more people are added to the active population (18-64) while the number of young dependents will decline because of the baby bust and the number of elderly dependents will grow only slightly—the increase held back because of the good times cohort (born in the 1930s):

"This demographic change should not fuel inflation and it should have little effect at all on total consumer demand, although it will change the composition of that demand. . . . Income per person will rise in the next few decades as the relative size of the working-age population rises simply because the number of young dependents will be comparatively small. Unemployment rates should diminish as the labor force grows older, leaving entry-level positions to the smaller generation following."[64]

Finally, because of its sheer size, the baby boom cohort has forced society to restructure a number of its institutions. Educational facilities and faculties—from kindergarten to graduate school—are in place and generally sufficient to handle future enrollments, thanks to pressure from the baby boom generation. Housing stocks have soared in recent years and, barring economic difficulties, will continue to soar during the 1980s because of pressure from the baby boom generation. The near future will see the creation of more slots in the economy, filled first by members of the baby boom generation and then made available for the next generation. But there is a complication here:

"The maturing of the [baby boom] generation is going to take place at the same time as the energy crunch raises costs and slows down the economy. If this combination is not thought about fairly carefully before fully into it, it could prove disastrous. However we respond, the population bulge increases the likelihood that we will switch from being a consumer society to being more a conserver society."[65]

The baby boom generation's final impact may also be positive, although it could at first be extremely troublesome. The huge numbers of elderly after 2020 will pose a final enormous baby boom problem for U.S. society. Yet the long-run contribution may well be positive. With the political clout they could wield, the baby boom elderly could assure so-

cial changes that would protect and benefit the oldest citizens of following generations.

Whatever does occur to our society, we can be certain that the behavior of the baby boom generation will be a major contributor. Future planning must constantly take into account the fact that back in the late 1940s young Americans decided to marry early, have their children soon after marriage, and produced somewhat larger families than their parents did and that pattern was not abandoned until the mid-1960s. The giant baby boom generation resulted and will be with us for another 70 years. □

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